From: Anisa Divine
Sent: Thursday, July 01, 2004 12:59 PM
To: Paul Benedict; Guivetchi, Kamyar; Mike Wade; Juricich, Rich A.
Cc: Beutler, Lisa; Sumi, David; Bill Jacoby; Grace L Chan; Jay Lund; BJ Miller
Subject: Bulletin 160 - Water Year Designations

Greetings,
In light of articles such as those below (see bold & bold in red - my highlights), I want express my growing misgivings regarding the water year designation in the SWP.

Point 1:
As you know, DWR designated 1998 a wet year, 2000 an average year, and 2001 a dry year. However, I am now consistently reading statements like the following, "With Southern California is in its sixth year of a drought that the U.S. Geological Survey calls the worst in five centuries..." Six years works back to : 2004, 2003, 2003, 2001, 2000, 1999 ...

The issue is, If folks in Southern California are sensing that they are in the 6th year of a drought, how are they going to take to the idea of 2000 as an average year?

Point 2:
It seems somewhat disingenuous to designate a particular type of water year for the entire state. Also, given the way a wet, dry and average year is determined (the degree of difference I think was something like 6"/year -- I don't remember), but anyway I do recall that for those of us in the desert, where the average rainfall is 3"/year -- we will never hit the radar in terms of whether we have a wet, dry or average year -- it will always be dry.

I think as the plan becomes more sophisticated with its data analysis and as regional planning is being emphasized, DWR would do well to choose whatever years it is analyzing, but to give the correct water year designations to the 10 hydrological regions & the other two areas -- mountain counties & Sacramento-San Joaquin Delta.

And, for those regions where rainfall is low or high, the low; average; and high designation would be altered to take account of the typical hydrology for those regions.

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-----Original Message-----
From: On Behalf Of Cohen, Jeff
Sent: Thursday, July 01, 2004 9:16 AM
To:
Subject: 2. DWR'S CALIFORNIA WATER NEWS: SUPPLY - 7/1/04

SHORTAGES / SAN BERNARDINO MOUNTAINS:

- **County begins water transfer; Wrightwood: Supplies being shuttled to aid drought-stricken rural community. - Riverside Press-Enterprise**
- **Water trucked to Wrightwood; Company purchasing supplies to ease shortage in mountain community -**
- **Victorville Daily Press**

SJ VALLEY:

- **Running on empty - Bakersfield Californian**
- **Rainy season driest in 13 years, storage meets demand; Irrigation officials say lower rainfall totals do not mean the valley is headed for a drought. Still, there's hope for a wetter season ahead. - Modesto Bee**
- **Modesto ID: Just leave us alone with our water - Modesto Bee**

GROUNDWATER RESOURCES / SONOMA COUNTY:

- **Grand jury urges new ground water plan; Report warns failure to properly manage supplies threatens well-being of residents, economy - Santa Rosa Press Democrat**
- **Editorial: Using less; Water conservation must be way of life for Californians - Santa Rosa Press Democrat**

INFRASTRUCTURE / CENTRAL COAST - SLO council OKs pipeline report; Mayor says water from North County lake will meet city's needs, but opponents fear too much growth and higher water bills - San Luis Obispo Tribune

DESALINATION PROJECTS - Board discusses partnership with agency for desal plant; Alliance could develop Moss Landing water source - Monterey County Herald

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SHORTAGES / SAN BERNARDINO MOUNTAINS
County begins water transfer - Wrightwood: Supplies are being shuttled to aid the drought-stricken rural community. -Riverside Press-Enterprise - 7/1/04 -By Imran Ghori, staff writer

With the possibility of a severe water shortage in Wrightwood, San Bernardino County officials have begun shuttling water to the rural mountain community. Well production in the mountain community is continuing to decline and the Board of Supervisors Tuesday declared a local state of emergency. **The production levels-which have fallen from 800 to 620 gallons per minute-are approaching those of a shortage two years ago when the county also shuttled in water from outside.**

But unlike July 2002, when water officials were taken by surprise, the privately held water utility, Southern California Water Co., is sounding an early alarm now. "This time we're being proactive in dealing with the potential situation before it happens," said James Gallagher, a vice president with the company.

The company is asking its approximately 2,600 customers to conserve water, landscaping only as necessary and sparingly inside, he said. The county began hauling water to supplement local supplies on Tuesday.

With Southern California in its sixth year of a drought that the U.S. Geological Survey calls the worst in five centuries, fire officials are particularly concerned about the availability of water in communities such as Wrightwood.

San Bernardino County Fire Chief Peter Hills said additional water tenders will be available in the community and immediately dispatched to fire calls. "We'll be automatically bringing water with us of a more significant volume," he said.

Gallagher blamed the drop in well production on below-normal rainfall in recent years that has resulted in aquifers not recharging as they have in the past. The water utility is drilling another well that it hopes to have up and running by the end of July, Gallagher said. The company also is working on a long-term solution to construct a pipeline that will draw water from wells on the north side of the San Bernardino Mountains. But that project is still several years away, he said. #

SAN JOAQUIN VALLEY

Running on empty - Bakersfield Californian - 7/1/04 - By Vic Pollard, staff writer, Sacramento Bureau

More and more beach area has been seen the past few weeks due to Isabella Lake levels going down. The inflow into the lake is currently much less than the outflow. Campers are filling up the campground at the Auxiliary Dam. So far, so good.

At midnight Tuesday, Kern County made it though **the sixth dry water year in a row** without skyrocketing water rates or rationing. But how long can that go on?

More and more climate experts are gazing at cloudless skies and wondering if man-made global warming or natural climate changemay be giving California aharsh new reminder of just how precious water is. Up to now, a huge supply of water beneath the San Joaquin Valley has protected Bakersfield residents from the drought. Most valley farmers have also done well with water imported from rivers to the north.

But in the foothills to the east and west, where the irrigation canals don't reach, cattle are beginning to run out of water, and grass and the wheat crops are suffering, farmers said.

The rain and snow that was so plentiful in the 1990s have dropped off dramatically, especially in the vast watershed that feeds the Colorado River to the east of California. A recent government report said that region may be entering the worst drought it has seen in 500 years.

It isn't quite that dry in the Golden State, but many scientists say disappointing spring runoffs on the Kern River and most other major streams throughout the Western United States in recent years may not be due solely to a lack of rainfall.

Man -- or Mother Nature -- may be altering historic spring temperature patterns. There are ominous signs that snowpacks in the Sierra Nevada and other Western mountain ranges are beginning to melt earlier than usual. That can send billions of gallons of water cascading down rivers and creeks into reservoirs that have not yet been emptied enough to hold the new flows.

When that happens, much of the water can flow over the dams and out to sea, leaving less for farms and cities.

Scientific opinion is sharply divided on how much of the recent change in water conditions in the West is due to global warming and how much is due to natural cycles in the region's climate. Global warming is often attributed to the buildup of man-made chemicals in the atmosphere.

But Bakersfield's water manager, Florn Core, knows one thing for sure about **the Kern River**, the chief source of drinking water for the city: "**We are in our sixth year of well below normal runoff**."

For the last six years, for reasons no one is sure of, many winter storms have petered out before they reached the southern Sierra, which feeds the Kern River. Since the early 1990s, those storms have been counted to pile snow deep on the mountains of Central and Northern California.

Low flows on the Kern mean that more water must be pumped from the ground by farmers, the city and private water companies like California Water Service. That lowers the underground water table. The lower it gets, the more expensive it is to pump, raising costs for already beleaguered farmers as well as domestic water suppliers.

Rick Iger of the Kern County Water Agency said, "We've seen a drop of about 30 feet in the water levels in the urban Bakersfield area **since 1999." That was the county's last good water year, when the Kern flowed at almost 21/2 times normal.**

Many of Kern County's water agencies have been aggressively storing water underground in recent years to protect against dry spells like this, but the aquifer is not a bottomless pit. Core said the city can go "several years" with conditions as dry as they are now without having to take drastic steps. "After that we would have to be more aggressive with our water conservation programs, maybe have tiered rates, with higher rates for greater water usage."

These would be far steeper than the rate increases seen by city residents recently.

The city and county might also have to implement controls on new development, although he said it is debatable whether that conserves water. "Most of the development occurs on converted agricultural land, so you're just exchanging one water use for another," he said.

But the dry weather is hurting the cattle ranchers and dry-land farmers who use unirrigated land in the foothills. For ranchers, springs are drying up and forage is disappearing earlier than usual. "For most of us, it means we cut back on the number of cattle we're able to run," said Bruce Hafenfeld, who runs his in the Kern River Valley around Weldon. "For us, we're down about 25 percent," he said, although he declined to talk about numbers.

That's especially galling, he said, because the cattle market has bounced back from the initial mad cow scare and is pretty good now.But not all cattlemen are hurting, at least not yet.

Kern County is marked by a series of microclimates. Hafenfeld's ranch is located in a swath that runs east and west through central Kern County, and is often drier than other parts of the county. By contrast, Jay Mitchell, who runs cattle in the Keene-Tehachapi area, said forage and water there have been fairly good for the last few years.

"**When you talk about drought in Kern County, I always ask where you're talking about, because it can be different," said Ralph Phillips, farm adviser on range and livestock issues for the University of California Cooperative Extension service.**

No one is sure whether the drought in Kern County or throughout the West is the result of global warming, but scientists are beginning to see some trends that disturb many of them. Dan Cayan and other climatologists at the Scripps Institute of Oceanography have been looking at a half century of stream flow records throughout the West.

"There's quite a broad footprint of a response to warming in which snowmelt and snow runoff is occurring earlier in the year," Cayan said. "We're seeing an advance of five days to three weeks, depending on the basin you're looking at," he said.

There was a dramatic early runoff in California this year, when an unusual heat wave hit in March. No one is ready to blame it on anything more than a natural change in the weather, but Cayan said it may be typical of what could become a pattern.

"All we can say about this one," Cayan said, "is that it was a really strong example of an exceptionally early spring." #

RELATED
Rainy season driest in past 13 years, but storage meets demand - Irrigation officials say lower rainfall totals do not mean the valley is headed for a drought. Still, there's hope for a wetter season ahead. - Modesto Bee - 7/1/04
By Melanie Turner, staff writer

A melting snowpack in March and browning foothills in April. Those were just a couple of signs that this year would end up a dry one. "It was like summer in March," said Walt Ward, the Modesto Irrigation District's assistant general manager for water operations.

The MID had measured 8.56 inches of rain as of Wednesday, the last day of the rainfall season. Assuming no rain fell through midnight, the season was the driest in 13 years -- about 4 inches below average.

Snowmelt began earlier than anyone at the MID could remember. The runoff, carried in the Tuolumne River, ended up in Don Pedro Reservoir, but the water level did not necessarily go up. The MID and its partner, the Turlock Irrigation District, had to let water out to keep the reservoir's level no higher than 801.9 feet above sea level through April 27.

In this way, the Army Corps of Engineers assures that the reservoir has adequate space for flood protection in the event of spring storms. "If it (melted) later in the year we could capture more of it," spokeswoman Kate Hora said. "It's an issue of timing."

Starting April 28, the MID and TID can capture all the water they want. Today, at 801.8 feet, the reservoir is 10.6 feet lower than the 10-year average for this time of year and 14 feet lower than it was at this time last year, MID officials said. The reservoir is full at the 830-foot mark.

The good news is that while the July 1-June 30 rainfall year was drier than usual, this summer has been a mild one so far, with temperatures in the valley rarely rising above 90. And there is enough water in the reservoir for the entire irrigation season, MID spokeswoman Maree Hawkins. "We have good storage," she said.

Farmers are getting their normal water allotments from the irrigation district, and their wells have plenty of water, too. "We're not to that point where supplies have been affected," said Wayne Zipser, executive manager of the Stanislaus County Farm Bureau.

Dry conditions have become a trend in recent years in the San Joaquin Valley. Rainfall levels have been below normal for three years, and this is the fifth year that snowfall has been below normal, Hora said.

Rainfall in the MID was about 70 percent of normal for the 2003-04 rainfall season. Snowmelt from the Sierra into the Tuolumne River is expected to be 63 percent of average, Hawkins said. The Tuolumne River watershed is 73.5 percent of average for rainfall, said Tony Walker, a spokesman for the TID. The Merced Irrigation District had measured 8.27 inches of rainfall as of Wednesday, lower than both last year's 10.93 inches and the average yearly rainfall 12.27 inches.

The lower rainfall totals do not mean the valley is headed for a drought. There is no benchmark for what constitutes a drought, Hora said. It is not just the number of years, but how dry conditions are. "In terms of severity, it's not very great," she said. The driest year since the MID began measuring rainfall in 1888 was 1912-13, with 4.3 inches.

Still, the MID is casting a hopeful eye on the next rainfall season, which technically starts today but generally does not see any rain until fall. "We'd like to see at least an average year, or better-than-average year both on rainfall and snowfall," Hawkins said. "It's not like we have much control over that."

Several people contacted this week, farmers and city dwellers alike, had nothing but good things to say about this year's weather. John Lagier, an organic fruit grower near Ripon, said the weather has been good for fruit picking. "We got our crops in safely. It's been nice."

Wednesday, on Semple Street in Modesto, Ame Patton watched her nephew and a next-door neighbor, both 2-year-olds, and commented: "This month just flew by. Usually by now you're kind of sweating it."

Scott Dennis, who lives on East Morris Avenue, said he was not sure the city's water restrictions had taken effect. "I have never seen a water inspector in this neighborhood."

In fact, restrictions took effect May 1: Watering is prohibited on Mondays, and residents must follow an odd-even address schedule on other days. Watering is allowed at odd-numbered addresses on Sundays, Wednesdays and Fridays, and at even-numbered addresses on Tuesdays, Thursdays and Saturdays. No matter what day, no watering is allowed from noon to 7 p.m. Also, shut-off nozzles are required on hoses used for washing cars.

Peter Cowles, acting director of the city's Engineering and Transportation Department, said the city has had "good cooperation" from people. The city has taken action against a "small handful" of people for breaking the rules, he said.

Phyllis Harriman said she was more concerned with new subdivisions using the water supply than with the low rainfall. "It's a water situation," the Modesto woman said. "We should stop building and start taking care of what we have here." Harriman said she also was concerned about contaminated wells -- city officials say they have shut down 19 of 99 active wells in Modesto due to contaminants.

Cowles said the city is drilling new wells and rehabilitating old ones. He said the city has had a tough time finding good quality water near some new subdivisions. "We've got to get this growth under control," Harriman said. "One of these days we won't be able to water. If this continues on, we'll have a desert situation."#

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